CHAPTER 1

INTRODUCTION

1-1. General

The emergence of the Information Age has created an increasingly complex environment that will continually challenge CHS IO. The IO environment is global, encompassing not only the Army, but all other Services, Department of Defense (DOD), allied, and coalition forces. This complex environment will affect how CHS IO collects, processes, and disseminates information.

a. The Army's capstone guide to IO, FM 100-6, explains the fundamentals of IO for the Army.

b. Combat health support IO doctrine prescribes guidelines that support the information mission area (IMA) for medical units. It provides basic principles and overarching guidance for the effective employment of automated information systems (AIS) and information technologies.

c. This publication describes Army medical management and operation of the IMA. In accordance with Army Regulation (AR) 25-1, the—

(1) Information mission area encompasses the responsibilities, activities, and programs associated with, and related to, the disciplines of telecommunications, automation, visual information, records management publications and printing, and libraries. The IMA is applicable to Army units organized under tables of organization and equipment (TOE) and tables of distribution and allowances (TDA).

(2) Information mission area addresses all three of the Army's environments—theater/tactical, strategic, and sustaining base. A specific goal of the IMA is the elimination of all artificial barriers between information and information systems in all environments. The purpose of referencing the Army's three environments is to assist in focusing the discussion of IMA on the major areas of interest. Most information and many information systems are located and function in more than one environment.

1-2. History

a. The first generation of computer-driven IO in the Army appeared in the form of embedded computers in weapons systems and management of the AIS to support administrative activities. These activities include logistics, financial, and personnel in the continental United States (CONUS), known as base operations (BASOPs) or the Standard Army Management Information Systems (STAMIS). The next generation appeared as battlefield command and control (C2) systems that began to incorporate various human and automated sensor systems. These were generally associated with specific battlefield operating systems (BOS) such as fire support, air defense, combat service support, and maneuver control. This generation was followed by the inclusion of function-specific administrative systems for combat service support (CSS). The Army's first use of field medical AIS was the development of the Theater Army Medical Management Information System (TAMMIS) that attempted to deliver computer support for logistics, patient administration, blood management, medical regulating, and C2. The most successful module was logistics, which today is employed in both fixed and deployed settings. Other functional modules are being replaced by newer systems; some developed by DOD Health Affairs (HA) under the military health system (MHS)

concept. An example of system replacement is the Patient Accounting & Reporting Real-Time Tracking System (PARRTS), an Army augmentation of the patient administration component of TAMMIS, itself to be replaced eventually by United States Army Transportation Command's (TRANSCOM's) Regulating and Command and Control Evacuation System (TRAC2ES). Another example is the Defense Blood Standard System (DBSS) for blood management.

b. In the area of clinical support, the Composite Health Care System (CHCS) has been field tested in two different settings: one, clinically fixed facilities in the CONUS, and two, facilities configured for field operations. This will permit continuous clinical support for hospital operations, down to Echelon III.

c. Finally, the most recent computer system efforts focus on the support of situational awareness through real-time C2 systems. This is achieved by the fusion of multiple sensor platforms to create a relevant common picture of the battlefield, shared by all users and tailored to their functional requirements. The CHS IO entry into this generation is the development of the Medical Situational Awareness and Control (MSAC) System, which will be the medical module to the Combat Service Support Control System (CSSCS). The MSAC system will be architecturally compatible with the Army's Maneuver Control System (MCS), which provides real-time awareness and disposition of enemy and friendly forces.

1-3. Information Operations Concept

The IO concept serves as the basis for developing doctrine, training, leader development, organizations, materiel, and soldiers (DTLOMS) changes that focus on the support of the Army's future operational capabilities (FOC). Further, the concept lists the requirements and solutions for providing integrated command, control, communications, computers, and intelligence (C4I) support to Army medical assets positioned worldwide. The concept studies and then calculates what is needed to provide optimal medical care when and where needed. This concept also applies to the Reserve Components medical force structure. Information operations is the framework accentuated by C4I and interwoven through each of the ten Army medical functional areas: medical treatment; medical evacuation and regulation; hospitalization; combat health logistics and blood management; preventive medicine (PVNTMED); veterinary services; dental services, combat stress control (CSC); C4I; and laboratory services. Information operations leverages the commander's ability to enable, enhance, and protect the decision cycle and mission execution to achieve an information advantage across the full range of military operations.

1-4. Operational Environment

Global connectivity is essential for linking the strategic, operational, and tactical aspects of IO and the ability to project forces worldwide. The global information environment (GIE) includes—

- All individuals, organizations, or systems, most of which are outside the control of military or National Command Authorities (NCA), that collect, process, and disseminate information to national and international audiences.

- All military operations and thus all Army medical operations that take place within the GIE, which is both interactive and pervasive in its presence and the influence it exerts upon those operations.

- Current and emerging technologies that permit any aspect of an Army medical operation to be made known to a global audience in near-real time and without the benefit of filters. Information Age technology and its related management ideas have influenced the Army and the AMEDD's organization and structure. This increased ability to communicate and transmit data impacts on all operating systems.

1-5. Doctrine Application

This doctrine is applicable to all CHS IO users and encompasses requirements for hardware, software, data, people, funding, and time.

a. The AIS in use by CHS units and organizations increases readiness across the operational continuum.

b. Information will be managed to improve CHS so that informed choices can be made by the commanders, providers, and users of the CHS IO systems.

c. Information systems will be protected from unintentional or unauthorized alteration, destruction, compromise, or disclosure.

d. Whenever possible, practical, and appropriate, present and future CHS AIS will be integrated with existing or emerging Army warfighter BOS (such as CSSCS, MCS, and/or the Army Global Command and Control System [AGCCS]) and DOD medical AIS.

e. Software applications will be engineered so that data is entered only once as a by-product of the business process.

f. Application of this doctrine enhances split-based operations.

g. Information systems for CHS IO will look and feel the same across all echelons of care.

1-6. Strategic Principles

The Army's medical "strategic principles" were adopted from the MHS Information Strategic Principles. These principles align the Army medical goals with those of the MHS and the Army, including the Army's Force XXI warfighting doctrine. Listed below are the MHS strategic principles:

a. Information systems will be designed to seamlessly support readiness across the spectrum of the MHS.

b. Information management entails ongoing planning, programming, estimating benefits, funding, deploying, implementing, and realizing benefits.

c. To progress requires aggressive tactical and objective benchmarking against the best practices in the civilian and federal sectors.

d. Information will be managed so it improves the understanding of how to effectively and efficiently provide health services. This allows informed choices by providers and beneficiaries based on the recognition of best value.

e. Information systems architecture will be designed and maintained so that computing and communications infrastructure systems are interchangeable, interoperable, reusable, and transparent to the user.

f. Information will be available when and where needed and protected from unintentional or unauthorized alteration, destruction, compromise, or disclosure.

g. Operational efficiency will be accomplished, whenever possible, using process reengineering to simplify and integrate common functions before investing in new or additional information technology.

h. Common functions will be supported by single, integrated information management approaches, consisting of uniform data sets, processes, and technical standards which do not mandate identical systems.

i. New business and information management processes will be validated through maximum use of on-site, rapid, user-based prototyping before systemwide deployment.

j. Rather than new development and whenever practical, competitive bidding will be used in compliance with these principles to obtain off-the-shelf products from the most cost-effective sources.

k. Processes will be engineered so that data is entered only once as a by-product of the business process.

l. Information management capabilities will offer consistent presentation, will be easy to use, and will be acceptable to users.

m. Information management capabilities will be deployed incrementally to accelerate uniform benefit realization for all MHS beneficiaries.